

SPECIAL ISSUE NEWSLINE

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Spencer Abraham visits Laboratory



JULIE KORHUMMEL/NEWSLINE

Energy Secretary Spencer Abraham presents Director Emeritus Edward Teller with DOE's highest honor, the Gold Award.

Teller receives DOE's highest honor

By Lynda Seaver
NEWSLINE STAFF WRITER

Energy Secretary Spencer Abraham on Tuesday presented Director Emeritus Edward Teller with the prestigious Gold Award, the Department of Energy's highest honor.

The award, consisting of a plaque with citation, a medallion and rosette, is in recognition of Teller's "outstanding contributions to science and the security of the nation." The secretary presented the award before a

Energy secretary praises Lab's service to nation

By Don Johnston
NEWSLINE STAFF WRITER

Energy Secretary Spencer Abraham lauded the Laboratory's work in national security as "vital to the nation" during an all-hands address to employees Tuesday afternoon.

"The missions that drive this Laboratory each day have never been more important," Abraham said. "The role you play here is absolutely vital."

In his opening remarks, the Energy secretary reflected on the Laboratory's 50th anniversary and paid special tribute to its co-founder, Director Emeritus Edward Teller (see accompanying article) for helping to win the Cold War and taking on new national security challenges.

"It's all well and good to honor the past, but it's the second part — keeping America safe in the coming years — that I want to talk about," he said, emphasizing that "this president and this administration understand and support the work you do at this Lab and throughout the complex, and we take pride in

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BRYAN QUINTARD/NEWSLINE

Prior to touring the National Ignition Facility, Spencer Abraham and his wife Jane (third and second from right) were presented with special hard hats by Ed Moses, George Miller and Michael Anastasio.

ABRAHAM

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that work and you... We understand the critical role Lawrence Livermore plays in national security and its relevance to DOE's core mission.

"The name of our agency may be the Department of Energy, but the core mission of the department is national security," Abraham said. "What that means is that all of the department's programs, initiatives, offices and facilities have to be judged by how they advance national security."

DOE advances national security not only through weapons and other national security programs, but also by "advancing the nation's energy security... and Livermore is dedicated to projects that do just that."

Abraham said the administra-

tion's support for national security and defense preparedness is borne out by the budgets it has requested, notably a \$433 million increase for the National Nuclear Security Administration (NNSA), including a 23 percent increase over fiscal year 2002 to improve the aging infrastructure of DOE labs and re-establish the nation's capability for producing plutonium pits.

Supporting

science, engineering and management skills that "enhance deterrence and reduce threats to our nation" also provides benefits to society "that go far beyond the military dimension of national security," he said.

The Laboratory "has ably handled its responsibility" to ensure the safety, security and reliability of the nation's nuclear stockpile for many years, Abraham said.

"In the last 10 years, however, you have had to do that without nuclear testing. This is one of the greatest technological challenges of our time," he said, adding, "you here at Livermore are playing a key role in helping us meet this challenge using the latest computing technologies and advanced modeling capabilities to determine our stockpile's reliability."

Noting DOE's announcement last week at the SuperComputing 2002 conference in Baltimore of the awarding of a contract to IBM to

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BRYAN QUINTARD/NEWSLINE

NIF Project Manager Ed Moses explains aspects of the laser facility to Energy Secretary Abraham.

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build the world's two fastest supercomputers — "Purple" and "Blue Gene/L" — Abraham said these two computers "will have peak performance speeds three to 10 times the speed of today's fastest computer.

"What's important about these machines isn't that they will set records for speed. That's fine for the headlines and the news stories," he said. "What's truly significant is how they will help us better carry out our national security obligations."

Abraham said certain nuclear weapons test simulations will be able to be calculated 390,000 times faster than on the 8-year-old Cray One supercomputer. "That's the speed of progress. That's the cutting edge."

However, even Purple and Blue Gene/L will one day be "obsolete curiosities" and replaced by even faster machines, he said, that when that happens, "we will be able to assess the safety, security and reliability of our nuclear deterrent with even more precision and accuracy. In a dangerous world, we must never slacken our efforts to

improve these capabilities."

Abraham also described nonproliferation programs initiatives,



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From left to right: Energy Secretary Spencer Abraham, Director Michael Anastasio and acting NNSA Administrator Linton Brooks. In his address, Abraham praised Brooks' leadership.

notably establishing the G-8 Global Partnership Against the Spread of Weapons and Materials of Mass Destruction and efforts to "focus international attention on the threat posed by radiological dispersal devices or dirty bombs."

"Without Lawrence Livermore, America's nonproliferation efforts would be far less effective," he said.

Speaking of legislation signed by President Bush Monday, creating the Department of Homeland Security, Abraham said, "over the next few months the specifics, detailing

Livermore's contribution to the new department, will be worked out. I expect that this Lab will provide the same high level of expertise and services to the Department of Homeland Security that you will continue to provide to DOE.

During his visit to the Laboratory, the Energy secretary received briefings on LLNL stockpile stewardship and nonproliferation program efforts and toured the National Ignition Facility. Abraham was accompanied by his wife, Jane Abraham, who received a special presentation on the Lab's medical technologies program, hosted by Tamara Jernigan.



MICHAEL ANTHONY/TID

From left to right: Phyllis Cretsinger, Jane Abraham and Carol Boyd at a medical technology presentation.

TELLER

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packed Bldg. 123 auditorium, following a special all-hands address to employees (see related story).

"Dr. Teller is one of the most remarkable of people," Abraham said just before presenting the award. "He is regarded, certainly, as one of the giant figures of the 20th century, whose contributions to winning both World War II and the Cold War are immeasurable.

"But I believe that Edward Teller should also be regarded as one of the most important figures of the 21st century," Abraham added. "Dr. Teller did not just help make the world safe from tyranny and aggression, he helped usher in the era of super-computing that drives so much of our current science. His unwavering support for scientific education has inspired countless young men and women to pursue lives in science.

"As the history of the 21st century unfolds, to be marked by fabulous advances in physics, computing, engineering and other fields, it will be to the visionary Edward Teller that so much is owed."

In making his presentation, Abraham noted this was his second meeting with Teller, the first coming last November. Abraham joked about how the conversation turned to visionary science and technology, and "his technical insights left me at the starting blocks."

The Gold Award has been given to



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Edward Teller, flanked by Energy Secretary Spencer Abraham (left), his wife Jane Abraham (right) and Michael Anastasio.

only a handful of recipients, most recently to Gen. John Gordon, the first administrator of the National Nuclear Security Administration and now a member of President Bush's National Security Council.

Reading from the citation, Abraham presented the award to Teller "in recognition of your outstanding contributions to science and the security of our nation. Your visionary role in the development of thermonuclear explosives, the establishment of Lawrence Livermore National Laboratory, the secure second strike deterrence and missile defense, as well as advising many U.S. presidents, is especially appreciated. Your broad and far-reaching vision, brilliant technical insights, and strong leadership have inspired generations of scientists, students, policy makers and leaders."

Upon receiving the award, Teller

was greeted with a standing ovation. He humbly thanked the secretary, then outlined a few of what he felt were the significant achievements of the Laboratory, among them the submarine-based missile system and what he calls a next frontier — bio-science, including the Human Genome Project. He praised DOE for "doing everything to meet the challenges" during his 60 years of work with Los Alamos and Lawrence Livermore, then turned his praise to Lab employees as well as the future corps of researchers "to do much more

than I have done."

Teller closed by noting "the best of imaginations will create a new world in the 21st century," then congratulated all affiliated with the Lab and DOE because they are "able to work under the leadership of a man like Spencer Abraham."

Teller was a physicist at Los Alamos Laboratory during World War II and later became its assistant director. His efforts led to his co-founding of the Lawrence Livermore National Laboratory in 1952. He served as director of the Lab from 1958-60, taught physics at the University of California and founded and chaired the UC Davis Department of Applied Science. In 1975, he was named Director Emeritus, and was also appointed Senior Research Fellow at Stanford's Hoover Institution, a position that he still holds.